

DOCKET FILE COPY ORIGINAL

RECEIVED

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

JAN 18 2000
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)

Service Rules for the 746-764 and)
776-794 MHz Bands, and Revisions)
to Part 27 of the Commission's Rules)

WT Docket No. 99-168

Issues Related to Guard Bands in the)
746-764 and 776-794 MHz Spectrum Block)

DA 00-31

COMMENTS OF SOUTHERN LINC

By: Carole C. Harris
Christine M. Gill
John R. Delmore

McDermott, Will & Emery
600 13th Street, N.W.
Washington, D.C. 20005-3096
202-756-8000

Michael D. Rosenthal
Southern Communications Services, Inc.
5555 Glenridge Connector, Suite 500
Atlanta, Georgia 30342
678-443-1500

Attorneys for Southern LINC

Dated: January 18, 2000

No. of Copies rec'd 0+4
List A B C D E

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Service Rules for the 746-764 and)	WT Docket No. 99-168
776-794 MHz Bands, and Revisions)	
to Part 27 of the Commission's Rules)	
Issues Related to Guard Bands in the)	DA 00-31
746-764 and 776-794 MHz Spectrum Block)	

COMMENTS OF SOUTHERN LINC

Pursuant to Section 1.415 of the Rules of the Federal Communications Commission, Southern Communications Services, Inc., d/b/a Southern LINC ("Southern LINC"), by its attorneys, respectfully submits Comments in response to the Public Notice released January 7, 2000 in the above-captioned matter.¹

INTRODUCTION

The Federal Communications Commission issued a Notice of Proposed Rulemaking ("NPRM") on June 3, 1999 to solicit comment on proposed service rules for the licensing of spectrum in the 746-764 MHz and 776-794 MHz Bands ("700 MHz Bands"), which are being reallocated primarily for various wireless uses.² After receiving numerous comments, the Commission issued a First Report and Order on January 7, 2000, in which it adopted service

¹ Public Comment Sought on Issues related to Guard Bands in the 746-764 and 776-794 MHz Spectrum Block, *Public Notice*, WT Docket No. 99-168, DA 00-31 (Jan. 7, 2000).

² In the Matter of Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, *Notice of Proposed Rulemaking*, WT Docket No. 99-168 (June 3, 1999).

rules, including technical, operational, and licensing rules, for 30 MHz of the 700 MHz Bands.³ The Commission also provided for two guard bands in the First Report and Order to protect the public safety licensees in the bands immediately adjacent to the 700 MHz Bands. However, the Commission deferred adopting rules on user criteria for the guard bands, choosing to obtain additional comment on that matter and issue final rules in a separate order.

Simultaneous with the release of the First Report and Order, the Commission issued a Public Notice seeking comment on issues relating to usage criteria for the guard bands.⁴ Southern LINC hereby sets forth comments in response to the Public Notice.

BACKGROUND

Southern LINC operates a digital, wide-area Specialized Mobile Radio ("SMR") system classified as a Commercial Mobile Radio Service ("CMRS") under Commission rules. It is the largest centrally switched, state of the art digital 800 MHz SMR system in the world, with an authorized service area of over 127,000 square miles. Sheriffs' departments, emergency management agencies, school systems, and businesses - well over 150,000 users in all - rely on the Southern LINC 800 MHz SMR system for critical communications.

Southern LINC employs Motorola's Integrated Digital Enhanced Network technology, a digitally enhanced, time division multiple access technology. This technology allows the transmission of six sets of voice communications simultaneously on a single channel and central processing of the communications for efficient spectrum use. Southern LINC provides voice dispatch service, full duplex telephone interconnect, and short message service (similar to alphanumeric paging). Throughout Southern LINC's service area, its customers can access

³ In the Matter of Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, *First Report and Order*, WT Docket No. 99-168 (Jan. 7, 2000).

⁴ Public Comment Sought on Issues related to Guard Bands in the 746-764 and 776-794 MHz Spectrum Block, *Public Notice*, WT Docket No. 99-168, DA 00-31 (Jan. 7, 2000).

Internet, municipal, and corporate intranet-based services, including e-mail, news, weather, and travel directions. All those functions are accessible through a single mobile or hand-held radio unit.

The continued viability and growth of Southern LINC is important to all of its current and potential customers, but is particularly important to the public safety community that uses it on a daily basis. By way of example, in the immediate aftermath of Hurricane Opal, Southern LINC's system was the only telephone service operating in parts of coastal Alabama and Florida where wireline and cellular service were disabled. Southern LINC is committed to continuing to provide its entire service area with an advanced communications system that meets the unique needs of public utilities, governments, emergency management agencies, ambulance services, and law enforcement. Providing access to additional spectrum suitable for advanced telecommunications would be highly beneficial to Southern LINC and similar SMR entities which share that goal and, in turn, would serve the public interest. Therefore, as explained below, the Commission should provide access to the guard bands in the 700 MHz Bands without prohibitive usage criteria.

DISCUSSION

A. Guard Band Licensees Should be Subject to Adjacent Channel Coupled Power Out-Of-Band Emission Limits.

The first issue on which the Commission seeks comment is what out-of-band emission ("OOBE") limits guard band licensees should be required to comply with in order to adequately protect public safety entities operating systems near the guard bands. This issue stems from the legislative history of the Balanced Budget Act of 1997, in which the House Conference Report

noted that "[t]he conferees also expect that the Commission will ensure that public safety service licensees continue to operate free of interference from any new commercial licensees."⁵ Balanced against that expectation, however, is Congress's other expectation, explicitly acknowledged by the Commission, that the Commission "enable viable commercial operations" in the 700 MHz Bands.⁶ Accordingly, the Commission must "strike a reasonable balance between protecting public safety and maintaining the commercial viability of [the 700 MHz Bands]."⁷

Southern LINC submits that licensees operating in the guard bands should be required to comply with the Adjacent Channel Coupled Power ("ACCP") OOB limits. Those limits were adopted by the Commission in September 1998 for public safety licensees operating in the 764-776 MHz and 794-806 MHz bands.⁸ In the First Report and Order in the proceeding underlying that adoption, the Commission described the attributes and benefits of ACCP. Based on those attributes and benefits, it is clear that its application in the instant situation is well-suited for protecting public safety entities. For example, the Commission noted that "ACCP is an industry-developed method to assess compatibility within the complex channel environment resulting from the initial Refarming Report and Order."⁹ Likewise, in the instant case, the newly allocated 700 MHz Bands will also involve a complex channel environment; a variety of different uses, many of them for advanced services, are contemplated for the bands. Also, one of the reasons ACCP was adopted for public safety licensees in the 764-776 MHz and 794-806 MHz bands was

⁵ H. Conf. Rep. No. 105-217, at 580 (1997), *reprinted at* 1997 U.S.C.C.A.N. 201.

⁶ In the Matter of Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, *First Report and Order*, ¶ 104, WT Docket No. 99-168 (Jan. 7, 2000).

⁷ *Id.*

⁸ In the Matter of the Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communications Requirements Through the Year 2010, *First Report and Order and Third Notice of Proposed Rulemaking*, ¶ 138, WT Docket No. 96-86 (Sept. 29, 1998).

that they were specifically expected to "enter full-scale into digital communications." That, too, is generally the case with licensees in the newly allocated 700 MHz Commercial Bands.

An important further consideration is that compliance with ACCP is known to be attainable, so aspiring licensees will not be unfairly frozen out due to lack of affordable equipment or similar concerns.

Therefore, ACCP is the most appropriate OOB limits standard for striking a reasonable balance between protecting public safety and maintaining the commercial viability of the 700 MHz Bands. Thus, the Commission should adopt it for licensees operating in the guard bands.

B. Guard Band Licensees Should Not be Subject to Traditional Frequency Coordination.

Southern LINC contends that subjecting prospective guard band licensees to the public safety frequency coordination process is unnecessary and constitutes an undue burden on potential licensees.¹⁰ The ACCP OOB limits are strict, and if compliance with them is diligently enforced, interference problems will be kept to a minimum. Granting public safety frequency coordinators (or band managers) authority over the licensing process would delay the implementation of services to the public. Certification that a guard band licensee meets the interference criteria when it applies to the Commission for formal licensing will be adequate to ensure compliance. License applications could simultaneously be filed with public safety frequency coordinators who could be responsible for the maintenance of a national database of operations on the guard band frequencies. This can be achieved without giving coordinators *authority* over the licensing process. Rather, guard band licensees should be required to provide

⁹ *Id.* at ¶ 137.

¹⁰ The band manager concept is particularly problematic. As noted by Commission Furchtgott-Roth in his dissent to this proceeding's *First Report and Order*, utilizing band managers may completely preclude important uses of the guard bands and be contrary to Congress's mandate in 47 U.S.C. § 337(a)(2) that the

pertinent information on their use of the channels to frequency coordinators or similar stewards of a database, and that database could be used for *informational purposes* to avoid overt licensing conflicts and to quickly resolve interference problems should they arise.

C. Entities That Use Cellular-Like Frequency Re-Use Patterns Should be Allowed to License The Guard Bands Provided They Meet the ACCP OOB Limits.

The Commission also seeks comment on whether entities that have an architecture that employs an intense, cellular-like frequency re-use pattern ("cellular-like entities") should be prohibited from using the guard bands. Southern LINC submits that they should not be, so long as they meet the ACCP OOB limits.

As an initial matter, prohibition of entities with such an architecture is arguably contrary to the Commission's statutory mandate. The Commission's authority to reallocate the 700 MHz Bands is derived from 47 U.S.C. § 337. Section 337(a)(2) provides that the spectrum at issue be allocated for "commercial use." There is no language permitting the Commission to pare down the definition of "commercial use" to include only *certain types* of commercial use and users. However, that is exactly what would be achieved by prohibiting cellular-like entities from using the guard bands. This point was alluded to by Commissioner Furchtgott-Roth, in the context of using band managers, in his dissent to this proceeding's *First Report and Order*:

I believe these guard bands should be open to all bidders willing to accept our interference limits on these bands. . . . I cannot support proposals that would limit eligibility to a particular type of licensee. It seems to me the Commission should not be dictating business models to our licensees. In essence this limitation would say, if you want this spectrum, here is what your company needs to look like. I see no basis for such a proposed limitation.

involved spectrum be put to "commercial use" (whether band managers qualify as "commercial use" is highly questionable).

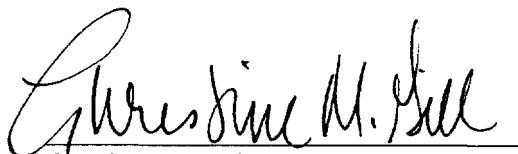
An additional reason not to prohibit cellular-like entities from licensing the guard bands is that doing so is unnecessary and needlessly limits use of the spectrum. The only reason to prohibit cellular-like entities from licensing the guard bands is to gain the benefits of spatial attenuation. However, Southern LINC submits that those same benefits can be gained by mandating the ACCP OOB limits discussed above. Therefore, the Commission does not need to implement both restrictions. The question thus becomes which restriction to implement.

The Commission should choose to implement the ACCP OOB limits, rather than the outright prohibition, because the ACCP OOB will accomplish the Commission objectives in regard to protecting Public Safety systems and at the same time will not preclude licensees from using state-of-the-art network architecture to meet their business objectives. Specifically, potential licensees that might not be able to overcome a flat prohibition on cellular-like system architecture *will* be able to meet the ACCP OOB limits. As such, fewer potential licensees will be prevented from licensing the guard bands for technical reasons if the Commission chooses the ACCP OOB limits option. Clearly, it is in the public interest for the Commission to choose the option that is less burdensome to licensees and permits the licensing of advanced telecommunications and other beneficial services. Because the ACCP OOB limits option maximizes efficient use of the 700 MHz spectrum, it is the one that should be implemented.

CONCLUSION

WHEREFORE, THE PREMISES CONSIDERED, Southern LINC respectfully asks the Commission to act in the public interest in accordance with the proposals set forth herein.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Christine M. Gill", written over a horizontal line.

Carole C. Harris
Christine M. Gill
John R. Delmore

McDermott, Will & Emery
600 13th Street, N.W.
Washington, D.C. 20005-3096
202-756-8000

Michael D. Rosenthal
Southern Communications Services, Inc.
5555 Glenridge Connector, Suite 500
Atlanta, Georgia 30342
678-443-1500

Attorneys for Southern LINC

Dated: January 18, 2000

CERTIFICATE OF SERVICE

I, Christine S. Bisio, do hereby certify that on this 18th day of January 2000, a single copy (unless otherwise noted) of the foregoing "Reply Comments Of Southern LINC" was hand-delivered to the following:

Magalie R. Salas, Esquire **(ORIGINAL PLUS 4 COPIES)**
Secretary
Federal Communications Commission
445 12th Street, S.W., Room TW-A325
Washington, D.C. 20554

William E. Kennard, Chairman
Federal Communications Commission
445 12th Street, S.W., 8th Floor
Washington, D.C. 20554

Michael Powell, Commissioner
Federal Communications Commission
445 12th Street, S.W., 8th Floor
Washington, D.C. 20554

Harold Furchtgott-Roth, Commissioner
Federal Communications Commission
445 12th Street, S.W., 8th Floor
Washington, D.C. 20554

Gloria Tristani, Commissioner
Federal Communications Commission
445 12th Street, S.W., 8th Floor
Washington, D.C. 20554

Susan Ness, Commissioner
Federal Communications Commission
445 12th Street, S.W., 8th Floor
Washington, D.C. 20554

Mr. Thomas J. Sugrue
Bureau Chief, Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, S.W., Room 3-C207
Washington, D.C. 20554

Mr. Stan Wiggins **(2 COPIES)**
Policy Division, Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, S.W., Room 3-C124
Washington, D.C. 20554

ITS
1231 20th Street, N.W.
Washington, D.C. 20036

Christine S. Bisso
Christine S. Bisso